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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,595	01/30/2001	Peter Hossel	51186	8957

26474 7590 11/27/2002

KEIL & WEINKAUF  
1350 CONNECTICUT AVENUE, N.W.  
WASHINGTON, DC 20036

EXAMINER

LAMM, MARINA

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 11/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/771,595

Applicant(s)

HOSSEL ET AL.

Examiner

Marina Lamm

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-5 and 7-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. In view of the appeal brief filed on 9/3/02, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-5 and 7-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dieing et al. (EP 0 893 117) in combination with either Matsumoto et al. (US 5,603,926) or Tanner et al. (US 5,827,508).

Dieing et al. teach cationic crosslinked polymers for use in hair care compositions, said polymers comprising 1-99.99% of a cationic or quaternized monomer such as 3-methyl-1-vinylimidazolium methyl sulfate and 0-98.99% of a water-soluble monomer such as N-vinylpyrrolidone. See EP 893 117 at p. 4, lines 20-25 and Translation. N,N'-divinylethylenurea can be used as a crosslinking agent. See EP 893 117 at p. 5, line 29, p. 7,

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Example 3 and Translation. The polymers of Dieing et al. are obtained by the same method of free-radical initiated solution polymerization as recited in the instant claims. See EP 893 117 at p. 5 and Translation. Matsumoto et al. teach hair cosmetic compositions comprising cationic polymers in combination with zinc oxide treated with silicone and titanium oxide treated with silicone (Example 51). Tanner et al. teach that it is conventional to employ sunscreen agents in a variety of personal care products. See col. 1, lines 51-53. Tanner et al. teach using a surface treated zinc oxide in combination with a dibenzoylmethane sunscreen compound in cosmetic compositions for providing excellent photostability, chemical stability and physical stability of the cosmetic compositions as well as good UVA protection. See col. 2, lines 18-22; col. 7, lines 17-34; col. 8, lines 49-54. The compositions of Tanner et al. may contain crosslinked cationic polymers. See col. 10-12.

One of ordinary skill would have been motivated to employ sunscreens of either Matsumoto et al. or Tanner et al. for hair care compositions of Dieing et al. for their art-recognized purpose and with a reasonable expectation of beneficial results such as improved photostability, chemical stability and physical stability of the compositions as well as good UVA protection.

Alternatively, it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to use cationic polymers of Dieing et al. in cosmetic composition of either Matsumoto et al. or Tanner et al. for their art-recognized purpose and with a reasonable expectation of beneficial results such as improved conditioning properties of the compositions.

*Response to Arguments*

The Applicants argue that “the only hair care compositions expressly discussed [in the Dieing reference] are shampoos.” They further argue that “[i]f the UV-absorbing compounds were introduced into this particular hair care composition, it seems that one of skill in the art would recognize that the UV-absorbing compound would be washed out of the hair with the copolymer.” In response, it is noted that the compositions of Dieing et al. are not limited to shampoos and include hair cosmetic such as hair sprays, gels, gel sprays, mousses, etc. See p. 6, lines 3-4 and Translation. Thus, the compositions of Dieing et al. need not to be washed out for the polymer may be used in compositions other than shampoos. Therefore, the purpose of UV-absorbing material is not lost and it is able to remain in the physical location where it can absorb UV light.

Further, the Applicants argue that “Tanner discloses that it is the *surface-treating* of the metal oxide that results in unexpected stability, and not combination of the metal oxide with an organic compound.” (emphasis in original). In response, it is noted that Tanner explicitly teaches that “[t]he resulting compositions [containing a surface treated zinc oxide in combination with a dibenzoylmethane sunscreen compound] demonstrate unexpected photostability, chemical stability and physical stability, as well as providing good UVA protection.” See col. 2, lines 18-22. Moreover, Tanner teaches that “it is believed that the surface treatment of the zinc oxide renders the zinc oxide less reactive to the dibenzoylmethane derivative *and the other components in the composition, thereby resulting in less chemical and physical degradation of the composition.*” (emphasis added). See col. 2, lines 22-27.

Therefore, one skilled in the art would be motivated to employ the surface treated zinc oxide of

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Tanner et al. in the hair care compositions of Dieing et al. and would have reasonably expected that such modification would result in the improved photostability, chemical stability and physical stability of the compositions as well as good UVA protection.

*Conclusion*

4. No claim is allowed at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Lamm whose telephone number is (703) 306-4541.

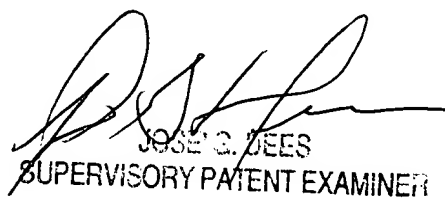
The examiner can normally be reached on Monday to Friday from 9 to 5.

The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

ml

11/22/02

  
JOSE C. DEES  
SUPERVISORY PATENT EXAMINER

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